

**IN THE CLAIMS:**

Please amend the claims as follows:

1. (Previously Presented) A wireless device comprising: a first section coupled to a first antenna and comprising:  
a first transmit path and a first receive path for a first wireless system and further comprising a first transmit path and a first receive path for a second wireless system, said first section for transmitting and receiving a first TDMA frequency band and for transmitting a second TDMA frequency band using the first antenna; and a second section coupled to a second antenna; and  
a second receive path for the first wireless system and a second receive path for the second wireless system, wherein the second receive path for the first wireless system is for receiving the second TDMA frequency band using the second antenna, and wherein the first and second receive paths for the second wireless system are for a single frequency band and the second TDMA frequency band is transmitted and received on different ones of the first and second antennas.
2. (Original) The wireless device of claim 1, wherein each transmit path comprises a power amplifier (PA).
3. (Original) The wireless device of claim 1, wherein each receive path comprises a filter and a low noise amplifier (LNA).
4. (Original) The wireless device of claim 1, wherein the first section further comprises a duplexer coupled to the first transmit path and the first receive path for the second wireless system.
5. (Original) The wireless device of claim 4, wherein the first section further comprises a transmit/receive (T/R) switch coupled to the first antenna, the first transmit path for the first wireless system, the first receive path for the first wireless system, and the duplexer.

6. (Original) The wireless device of claim 5, wherein the T/R switch is a single-pole three-throw (SP3T) switch.
7. (Original) The wireless device of claim 1, wherein the first receive path for the second wireless system is compliant with performance requirements of the second wireless system, and wherein the second receive path for the second wireless system is non-compliant with at least one of the performance requirements.
8. (Original) The wireless device of claim 1, wherein the second antenna is isolated from the first antenna by at least 22 decibels (dB).
9. (Original) The wireless device of claim 1, further comprising:  
a radio frequency (RF) unit coupled to the first and second sections and operable to perform signal conditioning for RF transmit signals for the first transmit paths for the first and second wireless systems and to further perform signal conditioning for RF received signals from the first and second receive paths for the first and second wireless systems.
10. (Original) The wireless device of claim 9, wherein the RF unit is operable to perform modulation and frequency upconversion on baseband transmit signals to obtain the RF transmit signals, and to perform frequency downconversion and demodulation on the RF received signals to obtain baseband received signals.
11. (Original) The wireless device of claim 10, wherein the RF unit performs modulation and frequency upconversion utilizing direct-conversion from baseband directly up to RF.
12. (Original) The wireless device of claim 10, wherein the RF unit performs frequency downconversion and demodulation utilizing direct-conversion from RF directly down to baseband.
13. (Original) The wireless device of claim 1, wherein the first section further comprises

a third receive path for the first wireless system, wherein the second section further comprises a fourth receive path for the first wireless system, and wherein the first, second, third, and fourth receive paths for the first wireless system are for four frequency bands.

14. (Original) The wireless device of claim 13, wherein the first and second receive paths for the first wireless system are for two commonly used frequency bands, and wherein the third and fourth receive paths for the first wireless system are for two less commonly used frequency bands.

15. (Original) The wireless device of claim 13, wherein the first section further comprises a second transmit path for the first wireless system, and wherein each of the first and second transmit paths for the first wireless system covers two of the four frequency bands.

16. (Original) The wireless device of claim 1, wherein the first section further comprises a second transmit path and a third receive path for the second wireless system, wherein the second section further comprises a fourth receive path for the second wireless system, and wherein the second transmit path and the third and fourth receive paths for the second wireless system are for a second frequency band of the second wireless system.

17. (Original) The wireless device of claim 1, wherein the first section further comprises a second transmit path and a third receive path for the first wireless system and a second transmit path and a third receive path for the second wireless system, wherein the second section further comprises a fourth receive path for the first wireless system and a fourth receive path for the second wireless system, wherein the first, second, third, and fourth receive paths for the first wireless system are for four frequency bands, and wherein the third and fourth receive paths for the second wireless system are for a second frequency band of the second wireless system.

18. (Original) The wireless device of claim 1, wherein the first wireless system is a Time Division Multiple Access (TDMA) system, and wherein the second wireless system is a Code Division Multiple Access (CDMA) system.

19. (Original) The wireless device of claim 18, wherein the first wireless system is a Global System for Mobile Communications (GSM) system.
20. (Original) The wireless device of claim 1, further comprising: a third section coupled to a third antenna and comprising a receive path for a satellite positioning system.
21. (Original) The wireless device of claim 20, wherein the satellite positioning system is Global Positioning System (GPS).
22. (Previously Presented) A device adapted to perform conditioning of signals communicated by way of a first antenna and to perform conditioning of signals received by way of a second antennas, said device adapted to communicate through wireless communication components, said components comprising:
- a first section coupled to the first antenna and comprising a first transmit path and a first receive path for a first wireless system and further comprising a first transmit path and a first receive path for a second wireless system, said first section for transmitting and receiving a first TDMA frequency band and for transmitting a second TDMA frequency band using the first antenna; and
  - a second section coupled to the second antenna and comprising a second receive path for the first wireless system and a second receive path for the second wireless system, wherein the second receive path for the first wireless system is for receiving the second TDMA frequency band using the second antenna, and wherein the first and second receive paths for the second wireless system are for a single frequency band and the second TDMA frequency band is transmitted and received on different ones of the first and second antennas.
23. (Previously Presented) The device of claim 22 wherein the first section of said components further comprises:
- a duplexer coupled to the first transmit path and the first receive path for the second wireless system; and
  - a transmit/receiver (T/R) switch coupled to the first antenna, the first transmit path for the first wireless system, the first receive path for the first wireless system, and the duplexer.

24. (Previously Presented) The device of claim 22 wherein the at least two TDMA bands are GSM bands.
25. (Previously Presented) An apparatus comprising:  
means for performing signal conditioning for a transmit path and a first receive path for a first wireless system, the transmit path for transmitting a first TDMA frequency band and for transmitting a second TDMA frequency band using a first antenna and the first receive path for receiving the first TDMA frequency band;  
means for performing signal conditioning for a transmit path and a first receive path for a second wireless system;  
means for coupling the transmit path and the first receive path for the first wireless system and the transmit path and the first receive path for the second wireless system to the first antenna;  
means for performing signal conditioning for a second receive path for the first wireless system, wherein the second receive path for the first wireless system is for receiving the second TDMA frequency band using a second antenna;  
means for performing signal conditioning for a second receive path for the second wireless system; and  
means for coupling the second receive path for the first wireless system and the second receive path for the second wireless system to the second antenna, and wherein the first and second receive paths for the second wireless system are for a single frequency band and the second TDMA frequency band is transmitted and received on different ones of the first and second antennas.
26. (Original) The apparatus of claim 25, wherein the first wireless system is a Time Division Multiple Access (TDMA) system, and wherein the second wireless system is a Code Division Multiple Access (CDMA) system.
27. (Previously Presented) A wireless device comprising:  
a first section coupled to a first antenna and comprising a first transmit path and a first

receive path for a first wireless system and a second transmit path for a second wireless system, wherein the first antenna is used for transmitting data to the first and second wireless systems, said first section for transmitting and receiving a first TDMA frequency band and for transmitting a second TDMA frequency band using the first antenna; and

a second section coupled to a second antenna and comprising a second receive path for the first wireless system and a second receive path for the second wireless system, wherein the second receive path for the first wireless system is for receiving the second TDMA frequency band using the second antenna and the second TDMA frequency band is transmitted and received on different ones of the first and second antennas.

28. (Previously Presented) A method of operating a wireless device, comprising:  
coupling, via a transmit/receive (T/R) switch, a transmit path for transmitting a first TDMA frequency band and for transmitting a second TDMA frequency band using the first antenna for a first wireless system, a first receive path for the first wireless system for receiving the first TDMA frequency band, or both a transmit path and a first receive path for a second wireless system to a first antenna; and

coupling a second receive path for the first wireless system and a second receive path for the second wireless system to a second antenna, and

wherein the second receive path for the first wireless system is for receiving the second TDMA frequency band using the second antenna, and wherein the first and second receive paths for the second wireless system are for a single frequency band and the second TDMA frequency band is transmitted and received on different ones of the first and second antennas.

29. (New) A wireless device, comprising:  
at least first and second antennas; and  
at least one processor for processing first frequency band signals received from a first wireless system on the first antenna, for processing second frequency band signals received from the first wireless system on the second antenna, and for processing single band signals received from a second wireless system on both the first and second antennas.

30. (New) The wireless device of claim 29, wherein the first wireless system utilizes time

division multiplexing.

31. (New) The wireless device of claim 30, wherein the second wireless systems utilizes at least one of orthogonal frequency division multiplexing (OFDM) and code division multiple access (CDMA).

32. (New) The wireless device of claim 31, further comprising at least one processor configured to monitor signals for the first and second wireless systems and, based at least in part on the monitored signals, coordinate a handover between the first and second wireless systems.

33. (New) The wireless device of claim 29, further comprising one or more switches to selectively complete transmit and receive paths for signal paths of the first and second wireless systems based on an operating mode of the wireless device.

34. (New) The wireless device of claim 33, wherein the one or more switches comprise at least two switches.

35. (New) The wireless device of claim 29, wherein a first receive path for signals of the second wireless system is compliant with performance requirements of the second wireless system, and wherein a second receive path for signals of the second wireless system is non-compliant with at least one of the performance requirements.

36. (New) The wireless device of claim 29, wherein the second antenna is isolated from the first antenna by at least 22 decibels (dB).

37. (New) An apparatus for wireless communications, comprising:  
means for processing first frequency band signals received from a first wireless system  
on a first antenna;  
means for processing second frequency band signals received from a first wireless system  
on a second antenna; and  
means for processing single band signals received from a second wireless

system on both the first and second antennas.

38. (New) The apparatus of claim 37, wherein the first wireless system utilizes time division multiplexing.

39. (New) The apparatus of claim 38, wherein the second wireless systems utilizes at least one of orthogonal frequency division multiplexing (OFDM) and code division multiple access (CDMA).

40. (New) The apparatus of claim 39, further comprising means for monitoring signals for the first and second wireless systems and, based at least in part on the monitored signals, coordinating a handover between the first and second wireless systems.

41. (New) The apparatus of claim 37, further comprising means for selectively completing transmit and receive paths for signal paths of the first and second wireless systems based on an operating mode of the wireless device.

42. (New) The apparatus of claim 41, wherein the one or more switches comprise at least two switches.

43. (New) The apparatus of claim 37, wherein a first receive path for signals of the second wireless system is compliant with performance requirements of the second wireless system, and wherein a second receive path for signals of the second wireless system is non-compliant with at least one of the performance requirements.

44. (New) The apparatus of claim 37, wherein the second antenna is isolated from the first antenna by at least 22 decibels (dB).

45. (New) A method for wireless communications, comprising:  
\_\_\_\_\_ processing first frequency band signals received from a first wireless system on a first antenna;



processing second frequency band signals received from a first wireless system on a second antenna; and

processing single band signals received from a second wireless system on both the first and second antennas.

46. (New) The method of claim 45, wherein the first wireless system utilizes time division multiplexing.

47. (New) The method of claim 46, wherein the second wireless systems utilizes at least one of orthogonal frequency division multiplexing (OFDM) and code division multiple access (CDMA).

48. (New) The method of claim 47, further comprising:  
monitoring signals for the first and second wireless systems; and  
coordinating, based at least in part on the monitored signals, a handover between the first and second wireless systems.

49. (New) The method of claim 45, further comprising:  
selectively completing transmit and receive paths for signal paths of the first and second wireless systems based on an operating mode of the wireless device.

50. (New) The method of claim 49, wherein the selectively completing utilizes at least two switches.